

PATENT

IN THE CLAIMS:

Please amend claims 1, 6-8, 11, 12, 16-18, 21-28, 38-40 and 42 as indicated in the following.

Please cancel claims 2-5, 14, 15, 19, 20, 29, 30 and 33 without prejudice as indicated in the following.

Please add claims 43-53 as indicated in the following.

Claims Listing:

1. (Currently Amended) A method comprising ~~the steps of:~~
identifying an operating characteristic ~~based on a number of commands queued in an instruction buffer~~ of an instruction buffer, the operating characteristic comprising at least one of a buffer fullness, a rate of change of a number of pending instructions stored in the instruction buffer or a type of instructions stored in the instruction buffer; and
adjusting a system characteristic based on the operating characteristic, wherein a power consumption of a system is modified based on the system characteristic.
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Currently Amended) The method as in Claim 1, wherein the operating characteristic includes ~~fill rate associated with the instruction buffer~~ a rate of change in a number of pending instructions stored in the instruction buffer.
7. (Currently Amended) The method as in Claim 1, wherein the operating characteristic includes a type of instructions stored in the instruction buffer.

PATENT

8. (Currently Amended) The method as in Claim 1, wherein ~~the step of~~ adjusting the system characteristic includes altering the number of bits used to represent multimedia data.
9. (Original) The method as in Claim 8, wherein the multimedia data includes video data.
10. (Original) The method as in Claim 8, wherein the multimedia data includes audio data.
11. (Currently Amended) The method as in Claim 1, wherein ~~the step of~~ adjusting the system characteristic includes ~~reducing~~ modifying a clock speed ~~used to process commands~~.
12. (Currently Amended) The method as in Claim 11, wherein a nominal power provided to the system is ~~altered to match~~ modified based on an amount of power needed for the clock speed used.
13. (Original) The method as in Claim 11, wherein a number of bits used to represent multimedia data is reduced.
14. (Canceled)
15. (Canceled)
16. (Currently Amended) The method as in Claim 1, wherein ~~the step of~~ adjusting the system characteristic includes ~~altering~~ modifying a nominal power provided to the system.
17. (Currently Amended) The method as in Claim 16, wherein a clock speed ~~changed to match a change in the nominal power~~ is modified based on the modification of the nominal power.
18. (Currently Amended) The method as in Claim 16, wherein a number of bits used to represent multimedia data is ~~changed to match a change in~~ modified based on the modification of the nominal power.
19. (Canceled)

PATENT

20. (Canceled)

21. (Currently Amended) The method as in Claim 1, wherein the operating characteristic is ~~based on~~includes a buffer fullness.

22. (Currently Amended) The method as in Claim 21, wherein ~~the step of~~ adjusting the system characteristic includes reducing a clock speed when the buffer fullness is less than a predetermined buffer fullness.

23. (Currently Amended) The method as in Claim 21, wherein ~~the step of~~ adjusting the system characteristic includes reducing a maximum power provided to the system when the buffer fullness is less than a predetermined buffer fullness.

24. (Currently Amended) The method as in Claim 21, wherein ~~the step of~~ adjusting the system characteristic includes reducing a number of bits to represent multimedia data when the buffer fullness is less than a predetermined buffer fullness.

25. (Currently Amended) The method as in Claim 21, wherein ~~the step of~~ adjusting the system characteristic includes increasing a clock speed when the buffer fullness is greater than a predetermined buffer fullness.

26. (Currently Amended) The method as in Claim 21, wherein ~~the step of~~ adjusting the system characteristic includes increasing a maximum power provided to the system when the buffer fullness is greater than a predetermined buffer fullness.

27. (Currently Amended) The method as in Claim 21, wherein ~~the step of~~ adjusting the system characteristic includes increasing a number of bits to represent multimedia data when the buffer fullness is greater than a predetermined buffer fullness.

PATENT

28. (Currently Amended) A system comprising:
- an instruction buffer to store pending instructions;
 - a threshold register to store a statistic threshold;
 - an buffer monitor to:
 - track a buffer statistic;
 - provide a buffer status of said buffer statistic to a power threshold, wherein said buffer status represents a comparison of said buffer statistic and said statistic threshold; and
 - a power module to initiate a power conservation feature based on said buffer status.
29. (Canceled)
30. (Canceled)
31. (Original) The system as in Claim 28, wherein said pending instructions include multimedia instructions.
32. (Original) The system as in Claim 31, wherein said multimedia instructions include display instructions.
33. (Canceled)
34. (Original) The system as in Claim 28, wherein said buffer statistic includes a fullness of said instruction buffer.
35. (Original) The system as in Claim 28, wherein said buffer statistic includes a number of pending instructions in said instruction buffer.
36. (Original) The system as in Claim 28, wherein said buffer statistic includes a rate of change in a number of pending instructions in said instruction buffer.

PATENT

37. (Original) The system as in Claim 28, wherein said buffer statistic includes types of instructions in said instruction buffer.

38. (Currently Amended) A computer readable medium tangibly embodying a program of instructions to manipulate a data processor to:

identify an operating characteristic of an instruction buffer, the operating characteristic comprising at least one of a buffer fullness, a rate of change of a number of pending instructions stored in the instruction buffer or a type of instructions stored in the instruction buffer~~based on a number of instructions queued in an instruction buffer~~; and

adjust a system characteristic based on the operating characteristic, wherein a power consumption of the system is modified based on the system characteristic.

39. (Currently Amended) The computer readable medium as in Claim 38, wherein the operating characteristic includes a rate of change in the number of instructions ~~queued~~ stored in the instruction buffer.

40. (Currently Amended) The computer readable medium as in Claim 38, wherein the operating characteristic includes a type of instructions of the instructions ~~queued~~ stored in the instruction buffer.

41. (Original) The computer readable medium as in Claim 38, wherein the system characteristic includes a number of bits used to represent multimedia data.

42. (Currently Amended) The computer readable medium as in ~~Claim 41~~ Claim 38, wherein the system characteristic includes a clock speed used to process the instructions.

43. (Original) The computer readable medium as in Claim 38, wherein the system characteristic includes a supported power.

44. (New) The computer readable medium as in Claim 38, wherein the operating characteristic includes a buffer fullness.

PATENT

45. (New) The method as in Claim 6, wherein adjusting the system characteristic includes modifying a clock speed.
46. (New) The method as in Claim 6, wherein the adjusting the system characteristic includes modifying a maximum power provided to the system.
47. (New) The method as in Claim 6, wherein adjusting the system characteristic includes modifying a number of bits to represent multimedia data.
48. (New) The method as in Claim 7, wherein adjusting the system characteristic includes modifying a clock speed.
49. (New) The method as in Claim 7, wherein the adjusting the system characteristic includes modifying a maximum power provided to the system.
50. (New) The method as in Claim 7, wherein adjusting the system characteristic includes modifying a number of bits to represent multimedia data.
51. (New) The system as in Claim 28, wherein the power conservation feature includes a modification of a clock speed.
52. (New) The system as in Claim 28, wherein the power conservation feature includes a modification of a maximum power provided to the system.
53. (New) The system as in Claim 28, wherein the power conservation feature includes a modification a number of bits to represent multimedia data.